August 30th.

Mr. LEA, President, in the Chair.

Present thirty one members.

The following papers were ordered to be printed in the Proceedings:

Description of a type of GOBIOIDS intermediate between Solinæ and Tridentigerinæ.

BY THEO. GILL.

EVORTHODUS Gill.

Body elongated, anteriorly subcylindrical, slowly declining to the caudal. Scales regularly imbricated, extending forwards to the eyes; those of the sides with pectiniform borders; those of the anterior part of the back cycloid Head thick, abbreviated, subquadrate in profile, above transversely convex, anteriorly truncated. Eyes large, approximated and wholly in the anterior half of the head. Mouth moderate. Tongue thick and stout, but not wide, anteriorly free, and with the margin entire. Teeth uniserial, compressed, straight, with parallel borders and emarginated crowns; those of the lower jaw nearly horizontal. Dorsal fins entirely disconnected; the first with anterior rays slightly filamentary, the second oblong. Caudal and pectorals rounded. Ventrals infundibuliform, with the interspinal membrane low.

This genus is well distinguished by its dentition, and appears to thus connect the true Soline, whose teeth are acute, with the Tridentigerine, in which they are tridentiform. The sub-family of Tridentigerine includes two genera, both of which are peculiar, as far as is known, to the Pacific ocean. In Tridentiger, Gill, there is behind the row of tridentiform teeth of each jaw, a row of simple acute ones. In Tridenophorus,* Gill, simple teeth only are behind the tridentiform ones of the lower jaw. Both of those genera also differ from

Evorthodus as well as from each other in the form of the head.

EVORTHODUS BREVICEPS Gill.

The body regularly declines from the first dorsal to the end of the second; at the former point, the height is a sixth of the extreme length, and the least height is an eleventh of the same. From the dorsal to the snout, the outline is evenly curved.

The short head constitutes about a sixth of the extreme length; its greatest breadth and width are nearly equal to each other, and each bears a proportion

to the length of about thirteen to seventeen.

The eyes are situated entirely in the anterior half of the head; the diameter of an orbit equals a third of the head's length; the interorbital space is narrow.

The mouth is extended very little backwards.

The anal fin commences under the second or third ray of the second dorsal, and has (sometimes) one more ray than that fin.

The caudal, when expanded, has a rounded margin, and forms a fourth of the total length.

D vi, 1, 9 - A 1, 10 - C 5, 7, 8, 6, P 17, V, I, 5+5+1.

The color is light brown with irregular blackish blotches along the sides; at the base of the caudal fin are two black spots, one above the other, alternating

^{*} The word Trianophorus having been previously used by Rudolphi for a genus in Helminthology, it is proposed to substitute for the ichthyic genus, the name of Trianophorichthys, and for the species that of T. trigonocephalus.

1859.7

with one anterior on the peduncle. The first dorsal has two bands parallel with its upper margin; the second has three narrower longitudinal bands.

A single specimen of the species was found in the island of Trinidad, near the mouth of a river in the vicinity of the celebrated Pitch Lake.

Description of a new South American type of SILUROIDS, allied to Callophysus.

BY THEO. GILL.

PIMELETROPIS Gill.

Body naked, moderately elongated and compressed, tapering to the caudal. Head cuneiform in profile, depressed and ovate above, and sloping rapidly outwards. Supraoccipital extended longitudinally backwards, but not connected to a dorsal buckler. Eyes submedian and oblique. Barbels six, consisting of the maxillary and two pairs of mental. Branchial apertures large and continuous under the throat Branchiostegal rays generally eight. Mouth moderate and terminal; upper jaw slightly protruding. Teeth uniserial, wide, straight and truncated. Lateral line straight and extending to the caudal; anteriorly with lateral branches. Dorsal fin quadrangular, elevated anteriorly, and with its first ray simple and slender. Adipose fin elongated and cariniform. Anal fin similar in form to the dorsal, and under the adipose fin. Caudal fin deeply emarginated, and with equal and pointed lobes. Pectorals pointed, and with the superior ray simple and slender. Ventrals with the second ray longest.

Pimeletropis agrees in almost all of its essential characters with Callophysus of Müller and Troschel, but differs in the presence of the single row of teeth in each jaw. The same character, in connection with others, distinguishes it from Pimelenotus Gill.

PIMELETROPIS LATERALIS Gill.

The elongated and slender body is highest under the dorsal, and from its a termination the dorsal outline commences to slope backwards to the end of the long adipose fin, under the first half of which it is slightly curved, and then nearly straight; the caudal peduncle is slender and elliptical, but at the base of the caudal fin it appears compressed and expanded superiorly and inferiorly, from the recurrence of the rudimentary rays of the fin. The greatest height is about a sixth of the entire length from the snout to the concave margin of the caudal fin; that of the peduncle is little more than a third of the former.

The lateral line is perfectly straight, and is anteriorly furnished with diverg-

ing branches, which tend obliquely and posteriorly.

The head is above of an oval form, and declines to the region of the posterior nostrils, in a slightly concave line, to the eyes; the sides are posteriorly rounded near the skull, and thence descend obliquely outwards to the opercular margin. The head, from the snout to the margin of the operculum, forms nearly a fifth of the total length, and its greatest breadth bears a relation to this length of fourteen to nineteen. The width regularly diminishes from this point to the angle of the mouth, where the proportion is as ten to nineteen. The snout is obtusely horizontally rounded, and the space between the anterior and posterior nostrils is convex.

The skin is mostly smooth, but papillæ cover the space between the eyes and over the fontanelle; there are also a few meandering dermal grooves be-

low and behind the eves.

The supraoccipital process is linear, and four times longer than broad.

The eyes are longitudinally oval and contracted by the skin; the longitudinal diameter within the skin exceeds a seventh of the head's length; their ante-